IN THE CLAIMS

For the convenience of the Examiner, all pending claims of the present Application are presented below whether or not an amendment has been made. Please amend the claims as follows:

1. **(Original)** A seismic energy source for use while drilling a wellbore, comprising:

a drive shaft adapted to be coupled to a drill string;

a housing rotatably supported outside the drive shaft;

at least one contact member on an exterior of the housing and selectively urged into contact with a wall of a wellbore surrounding the housing; and

means for selectively controlling a laterally outward force applied to the at least one contact member, the means for selectively controlling adapted to control the laterally outward force so as to induce a seismic signal in the wellbore detectable at the Earth's surface.

2. **(Original)** The source as defined in Claim 1, wherein the at least one contact member is engaged on one side with a means for applying the laterally outward force, the other side of the contact member being urged into contact with the wall of the wellbore by the means for applying the laterally outward force.

3. **(Original)** The source as defined in Claim 1, wherein the means for selectively controlling comprises a throttling valve, an outlet of which is in hydraulic communication with one side of at least one piston, an inlet of the throttling valve in selectively controlled hydraulic communication with a first reservoir and a second reservoir, the second reservoir having a higher hydraulic fluid pressure than the first reservoir, the other side of the at least one piston operatively urged into contact with the wall of the wellbore.

4. **(Original)** The source as defined in Claim 3, wherein the at least one piston forms the at least one contact member.

5. **(Original)** The source as defined in Claim 3, further comprising a rib in contact on one side with the at least one piston, the other side of the rib urged into contact with the wall of the wellbore.

6. **(Original)** The source as defined in Claim 3, further comprising means for operating the throttling valve to select between the first reservoir and the second reservoir by sweeping through a selected frequency range.

7. **(Original)** The source as defined in Claim 3, wherein the second reservoir is charged to a pressure such that operating the throttling valve to select the second reservoir provides a pressure impulse to the piston.

8. **(Original)** The source as defined in Claim 3, wherein the at least one piston comprises four pistons, each piston disposed between the housing and a corresponding rib, each of the pistons hydraulically coupled on one side to the throttling valve and adapted to urge the corresponding rib into contact with the wall of the wellbore.

9. **(Currently Amended)** The source as defined in Claim 1, further comprising means for converting relative rotation between the drive shaft and the housing into at least one of hydraulic pressure to charge ~~**the accumulator**~~ **an accumulator** and electrical power to operate electrical circuits proximate the source.

10. **(Original)** A method for generating seismic signals in a wellbore during drilling thereof, comprising:

selectively varying a laterally outward force on a contact member engaged with a wall of a wellbore, the contact member disposed on a housing rotatably supported on a driveshaft coupled to a drill string, the selectively varying adapted to cause generation of a seismic signal detectable at the Earth's surface.

11. **(Original)** The method as defined in Claim 10, wherein selectively varying comprises changing between a higher force and a lower force within a swept frequency range.

12. **(Original)** The method as defined in Claim 10, wherein selectively varying comprises changing to a higher force so as to generate a seismic impulse in the wellbore.

13. **(Original)** The method as defined in Claim 10, further comprising detecting a seismic signal transmitted through the drill string proximate the Earth's surface, and cross correlating the seismic signal transmitted through the drill string with detected seismic signals transmitted through the Earth.

14. **(Currently Amended)** A method for preparing a seismic survey during drilling of a wellbore, comprising:

generating a seismic signal with a downhole steering tool while drilling a wellbore, the seismic signal operable to transmit through the Earth to the Earth's surface**, the downhole steering tool comprising a drive shaft adapted to be coupled to a drill string and a housing rotatably supported outside the drive shaft**;

receiving the seismic signal at the Earth's surface; and

generating a seismic survey based on the seismic signal.

15. **(Original)** The method of Claim 14, wherein generating a seismic signal comprises selectively varying a laterally outward force on a contact member of the downhole steering tool engaged with a wall of the wellbore.

16. **(Original)** The method as defined in Claim 15, wherein selectively varying comprises changing between a higher force and a lower force within a swept frequency range.

17. **(Original)** The method as defined in Claim 15, wherein selectively varying comprises changing to a higher force so as to generate a seismic impulse in the wellbore.

18. **(Original)** The method as defined in Claim 14, further comprising cross correlating the seismic signal received at the Earth's surface with a second seismic signal transmitted through a drill string coupled to the downhole steering tool proximate the Earth's surface.